



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/672,660 | 09/25/2003 | James R. Thacker | AB-299U | 9783 |

23845 7590 10/04/2006

ADVANCED BIONICS CORPORATION
25129 RYE CANYON ROAD
VALENCIA, CA 91355

EXAMINER

MULLEN, KRISTEN DROESCH

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3766

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,660

Applicant(s)

THACKER ET AL.

Examiner

Kristen Mullen

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/17/06 (Response).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 7-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Election/Restrictions

1. Claims 7-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 7/17/06.

Claim Objections

2. Claim 1 is objected to because of the following informalities: the word --set-- should be inserted after the word "parameter" in line 10. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 4-6 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Mouchawar et al. (6,738,668).

Regarding claim 1, Mouchawar shows a method comprising (a) selecting a stimulation parameter set (PA, PW) from a multiple of stimulation parameter sets (Figs. 3, 7, 10), (b) providing stimulation using the selected stimulation parameter set (Col. 9, lines 13-22), (c) obtaining a value for the level of power consumption (Q) of the selected stimulation parameter set (Figs. 3, 7), (d) communicating the level of power consumption of the selected stimulation parameter set (136, Fig. 10), (e) repeating steps (a) through (d) for each of the stimulation

Art Unit: 3766

parameter sets; and (f) selecting a stimulation parameter set based, in part, on the level of power consumption (138, Fig. 10) (Col. 9, line 13-Col. 13, line 22).

With respect to claim 2, Mouchawar further shows obtaining a value for the level of power consumption of the selected stimulation parameter set comprises: adjusting the stimulation level to find an adequate stimulation level for effective stimulation (Fig. 12); and computing the power consumption for the adequate stimulation level (from tables shown in Figs. 3, 4, 7 that correspond to rheobase levels).

Regarding claim 4, Mouchawar further shows adjusting the stimulation level comprises adjusting the pulse current level (amplitude) (Figs. 3, 4, 7, 12).

With respect to claim 5, Mouchawar shows computing the power consumption for the adequate stimulation level comprises using a formula ($Q = (V/R) * d$) to compute power consumption (Q) as a function of variables including pulse current level (V amplitude) and impedance (R) of the parameter set (Col. 9, line 63-Col. 10, line 18).

With respect to claim 6, Mouchawar further shows each of the stimulation parameter sets is a stimulation configuration unique from the other stimulation parameter sets (Figs. 3, 4, 7).

Regarding claim 21, Mouchawar shows a system comprising means for selecting a stimulation parameter set from a multiple of stimulation parameter sets (Figs. 3, 4, 7), means for providing stimulation using the selected stimulation parameter set (Col. 9, lines 13-22), means for obtaining a value for the level of power consumption (Q) of the selected stimulation parameter set (Fig. 3, 7), means for communicating the level of power consumption of the selected stimulation parameter (136, Fig. 10), (Col. 9, line 13-Col. 13, line 22).

Art Unit: 3766

5. Claims 1-2, 4, 6 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Weinberg et al. (6,934,583).

Regarding claim 1, Weinberg shows a method comprising (a) selecting a stimulation parameter set from a multiple of stimulation parameter sets (1550, 1552, 1554, 1556), (b) providing stimulation using the selected stimulation parameter set (1550, 1552, 1554, 1556), (c) obtaining a value for the level of power consumption of the selected stimulation parameter set (1520, 1560), (d) communicating the level of power consumption of the selected stimulation parameter set (1560), (e) repeating steps (a) through (d) for each of the stimulation parameter sets (1556, 1558, 1560); and (f) selecting a stimulation parameter set based, in part, on the level of power consumption (1568) (Fig. 24) (Col. 20, lines 23-65).

With respect to claim 2, Weinberg further shows obtaining a value for the level of power consumption of the selected stimulation parameter set comprises: adjusting the stimulation level to find an adequate stimulation level for effective stimulation (1556, 1564); and computing the power consumption for the adequate stimulation level (1560, 1568).

Regarding claim 4, Weinberg further shows adjusting the stimulation level comprises adjusting the pulse current level (amplitude) (Col. 20, lines 30-39).

With respect to claim 6, Weinberg further shows each of the stimulation parameter sets is a stimulation configuration unique from the other stimulation parameter sets (each parameter set included pulse width, frequency and amplitude, where only one is changed at a time)

Regarding claim 21, Weinberg shows a system comprising means for selecting a stimulation parameter set from a multiple of stimulation parameter sets (1550, 1552), means for providing stimulation using the selected stimulation parameter set (1554), means for obtaining a

Art Unit: 3766

value for the level of power consumption of the selected stimulation parameter set (1550,1560), means for communicating the level of power consumption of the selected stimulation parameter (1550, 1560) (Fig. 24) (Col. 20, lines 23-65).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mouchawar et al. (6,738,668) in view of van Lake (5,785,660). Mouchawar is as explained before. Mouchawar shows an external device for programming operating parameters but fails to specifically disclose that the stimulation level is adjusted using a joystick. Attention is directed to van Lake who shows it is well known to use a programming device including a joystick to adjust stimulation parameters of an implantable device (Col. 5, lines 7-23). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the method of Mouchawar to include adjusting the stimulation level using a joystick as taught by van Lake since it is well known in the art to utilize a joystick as an input device for a programmer to adjust stimulation parameters.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg et al. (6,934,583) in view of van Lake (5,785,660). Weinberg is as explained before. Weinberg shows an external device for programming operating parameter but fails to specifically disclose that the stimulation level is adjusted using a joystick. Attention is directed to van Lake who shows it is

Art Unit: 3766

well known to use a programming device including a joystick to adjust stimulation parameters of an implantable device (Col. 5, lines 7-23). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the method of Weinberg to include adjusting the stimulation level using a joystick as taught by van Lake since it is well known in the art to utilize a joystick as an input device for a programmer to adjust stimulation parameters.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen Mullen whose telephone number is (571) 272-4944. The examiner can normally be reached on M-F, 10:30 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3766

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kdm

Kristen Mullen
Patent Examiner
Art Unit 3766

A handwritten signature in black ink that reads "Kristen Mullen". The signature is written in a cursive, flowing style.